was appointed observer in the old Observatory at Copenhagen, which had been built at the time of Longomontanus, on the top of a high tower, and was therefore, after the lapse of two centuries, greatly behind the times, both as to locality and instruments. A few years afterwards he was appointed Professor of Mathematics at the Naval Academy, and Instructor in Geometrical Drawing at the Polytechnic School. These appointments he retained till the time of his death, as well as his position at the Observatory, and though he was in 1875, after the death of Prof. D'Arrest, strongly urged by the Minister of Public Instruction to allow himself to be appointed Professor of Astronomy, he preferred remaining as he was, partly owing to the pecuniary loss the change would have entailed, partly because his scientific activity was untrammelled by routine duties, and left him leisure to pursue his studies in whatever direction he chose.

As long as Schjellerup had only at his disposal the instruments of the old Observatory, he chiefly occupied himself with the computation of orbits of planets and comets, among which his determination of the orbit of the comet of 1580 deserves to be specially mentioned. This was founded on a complete reduction of Tycho Brahe's original observations of the distance of the comet from stars, and of his time determinations by altitudes and azimuths of standard stars. In 1861 the new Observatory was finished, and furnished with an 11-inch refractor by Merz and a transit-circle by Pistor and Martins. With the latter Schjellerup commenced in September 1861 to observe zones of stars, chiefly of the eighth and ninth magnitudes, between + 15° and − 15° declination, and already in the beginning of December 1863 he had finished the observation of ten thousand stars, while the reductions had been pushed on with so much energy that the complete catalogue of mean places for 1865 was laid before the Royal Danish Society of Science a month after. When it is remembered that the author of this work during the greater part of the year had to spend three or four hours a day in teaching, it will be conceded that he made good use of his time. The star catalogue is so well known for its fulness and accuracy that it is unneccessary to dwell further on it in this place. After its completion, Schjellerup intended, and had already commenced, to continue the observations north of the limit of + 15°, as Bessel had done forty years before, but about this time his interests took a new direction, which made him discontinue systematic observations, while he may also have been influenced by the circumstance that the great undertaking of the Astronomische Gesellschaft, viz. the observing of all stars in the northern hemisphere down to the ninth magnitude, had just then been planned, whereby zone work on Lalande's plan became of less importance.

Schjellerup now with his usual energy threw himself into the study of Oriental languages, especially Arabic and Chinese. In the Royal Library of Copenhagen he found a manuscript of the description of the heavens by the Persian astronomer Abd-al-Rahman al-Sûfi, a work which up to that time had been very little known among astronomers. Finding that it contained a complete and careful uranometry from the tenth century, or in other words from an epoch nearly equidistant between Ptolemy and Argelander, he resolved to translate it and was fortunate enough to obtain the use of another manuscript from the Imperial Library of St. Petersburg. The work was published in 1874 by the Academy of St. Petersburg under the title, "Description des étoiles fixes composée au milieu du dixième siècle de notre ère par l'astronome Persan Abd-al-Rahman al-Sûfi." It has been found most valuable by the astronomers who of late years have studied the relative brilliancy of the fixed stars, and Sûfi's results have been systematically collated with their own by Messrs. Peirce, Pritchard, and Pickering.

The great value which this old work was found to possess for modern research induced Schjellerup to endeavour to make other observations of the ancient astronomers fruitful for the investigations of the present day. To the journal *Copernicus* he contributed three papers under the common title, "Recherches sur l'Astronomie des Anciens." The first shows that the time stars of Hipparchus had been so well selected that their culminations gave the correct time every hour of the night within a minute, the second discusses the Chinese observations of the total eclipses of the years −708, −600, and −548, while the third compares seven conjunctions of the moon with fixed stars recorded by Ptolemy, with Hansen's lunar tables. He further examined the occultations and conjunctions of planets observed by the Greek astronomers, and the principal eclipses of the Middle Ages, but these investigations appear to have been left unfinished at his death.

Among Schjellerup's minor publications should be mentioned his catalogue of red stars (first published in 1866, and in a revised edition in 1874), which appeared most opportunely at a time when the spectroscope had just commenced to be applied to the study of the physical constitution of the stars.

In addition to being a man of very extensive knowledge, both scientific and general, Schjellerup was a kind teacher and friend, always willing to assist with his vast store of learning anybody who consulted him. His memory will be gratefully cherished by those who had the good fortune to know him.

J. L. E. DREYER.

NOTES.

DR. ASA GRAY, we are sorry to learn, has been stricken with apoplexy at his house in Cambridge, Massachusetts.

SIR GEORGE BURROWS, F.R.S., died on Monday. He was in his eighty-seventh year.

WE regret to have to announce the death, at the early age of thirty-four, of Prof. Humpidge, of the University College of Wales. Dr. Humpidge was educated at the Grammar School, Gloucester, was for some years in trade, and in spare time student in science classes, where he obtained a silver medal in geology from the Department. He afterwards studied at the School of Mines, and obtained one of the three Jodrell Scholarships. In the examination for B.Sc. at the London University he obtained the second place in the honours list, and the two years' £40 scholarship. After studying with Bunsen at Heidelberg, and teaching at Hofwyl in Berne, he was appointed in 1879 to the chemistry class at Aberystwith. At Kensington Dr. Humpidge carried on some researches on the coal-gas of the metropolis, under Prof. Frankland, and in Heidelberg he took up the study of the rare metals yttrium, erbium, and beryllium, results of which were published in the Journal of the Chemical Society, Philosophical Transactions, and Proceedings of the Royal Society. His later work was the preparation of several rare metals in a state of purity for the determination of their specific heats in his calorimeter. The fire which unfortunately destroyed the College in the summer of 1885 caused irreparable loss to Dr. Humpidge, all his papers and results and chemicals being burnt, and he had also a very narrow escape from the flames in endeavouring to rescue people and property. The shock of this accident undermined his health, and although he continued to teach in temporary premises for some time he was finally obliged to visit the South of Europe for a winter, but the relief was only temporary, and he succumbed, after three weeks of great suffering, on November 30. Dr. Humpidge translated Kolbe's "Inorganic Chemistry," which has reached its second edition. Unfortunately his long illness ran away with any provision that may have been made for his wife and family (two children of three and five years), and their sad condition calls for the consideration of his scientific colleagues.

In opening the exhibition, at the People's Palace, of the work of London apprentices, on Saturday, the Prince of Wales delivered an excellent speech on technical education. He was able to announce that, thanks to the generosity of the Drapers' Company and the Charity Commissioners, the People's Palace will soon be on a permanent footing. He also stated that the Ironmongers' Company and the Charity Commissioners are to co-operate for the establishment, in some other part of London, of an institution corresponding to the People's Palace—an institution for providing technical, scientific, commercial, and artistic education united with physical and social recreation.

A Committee, consisting for the most part of members of the two Commissions which presided over the Prehistoric and Ethnographic Sections in the Paris Exhibition of 1878, has been appointed by the French Minister of Commerce and Industry to preside over Section I. of Technological History at the Exhibition of 1889. This department, which will be located in the so-called Palais des Arts libéraux, will represent physical, or technical, anthropology, prehistoric archæology, and ethnography. The four other Sections connected with anthropological and ethnographic sciences will respectively illustrate the liberal arts, arts and trades, means of transport, and military arts. The President of the Committee is M. de Rozière, and the Acting Secretary M. P. Topinard, editor of the *Revue d'Anthropologie*, through whose pages an appeal is made to foreign as well as French anthropologists for contributions to this Section of the coming Exhibition, such, more especially, as casts of skulls and other parts of the body by which racial types can be best illustrated.

The Chief Signal Officer of the United States has issued his Report for the fiscal year ending June 30, 1887. The Report shows that there has been a growing demand for weather forecasts: as a rule, predictions are made for forty different districts. The system of cold-wave warnings continues in successful operation: these warnings imply that the temperature will fall below 45°, and that in twenty-four hours an abnormal fall of 15° or more will occur. Such predictions are valuable both as regards agricultural interests and personal comfort. A bulletin showing the effect of the weather for the previous seven days on important growing crops is now issued once a week. The State services play an important part in the meteorological organizations of the United States. These now number nineteen, in addition to the New England Meteorological Society. It is recommended that the attention of Congress be called to the propriety of making an appropriation for the service of telegrams now sent from the United States to Europe, in view of their importance to ship-masters of all countries.

At the meeting of the French Meteorological Society, on November 9, attention was drawn to the establishment of a meteorological station at Bagnères-de-Bigorre. This station is of importance from its position at the foot of the Pic-du-Midi, being about 7540 feet below the mountain observatory. M. Teisserenc de Bort submitted an atlas of maritime meteorology, which has just been published with the co-operation of the Central Meteorological Office of France.

On November 16, Dr. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands, was presented with a gold medal, at a banquet held in his honour, as a mark of respect on his completion of forty years of eminent services (1847–87). The meeting was attended by men of science from various countries.

Ciel et Terre of November 1 discusses an investigation of the surface temperature of the ocean, by Prof. O. Krümmel, in the *Zeitschrift für Wissenschaftliche Geographie*, containing charts for February and August, with coloured isotherms for each 2° C., over all oceans. The space occupied in latitude by water of 75° F. is calculated for the Atlantic and Pacific Oceans. Temperatures above 86° F. are found only at isolated points, as on the west coast of Central America, in August. Nearly 40 per cent. of the whole superficies of the ocean, both in February and August, has a temperature above 75°. The low temperature on the west coasts of Africa and South America is attributed by the author to the action of the winds instead of to the action of Polar surface currents, by which it has hitherto been explained.

During last autumn the German Fishery Association despatched the steamer *Holsatia* into the Baltic for scientific research, some of the results of which have just been made public. There were on board Prof. Hensen, Dr. Brandt, Dr. Oldenburg, and several officials connected with the German fisheries. The *Holsatia* left Memel on September 14, and, steering in a north-westerly direction, trawled over her course in order to ascertain what fish were most plentiful at that season. This proved to be herring. In the deep channel running to the north-west of Memel, between that city and the Hoberg bank, off the island of Gottland, it was found that the temperature of the sea, at a depth of 142 metres only, was 3° C., whereas at the surface it was 14° C. Several measurements were taken, but with the same result. This spot being one of the deepest in the Baltic, it has been suggested that this abnormal temperature may be caused by some cold under-current coming from the Gulf of Bothnia or the Bay of Finland. From this point the course was shaped for the island of Öland and the fishing-bank called "Mittelbank," soundings being taken throughout. Net-fishing was also carried on, particularly with a so-called "vertical" net, employed for the purpose of ascertaining the nature of the food of fish in certain waters. Some trawling resulted in the bringing up of boulders of a very curious shape, as well as mussels and other marine animals. All the objects brought up were photographed.

In the December Bulletin of Miscellaneous Information, issued from the Royal Gardens, Kew, there is an interesting account of cubebs, the value of which has risen rapidly during the last few years. There are also excellent papers on Sabicu wood, Mexican fibre or istle, the food-grains of India, broom root or Mexican whisk, Contrayerva, the introduction of the Brazil nut to the East Indies and Australia, and the Castilloa rubber of Central America.

Another comprehensive application of the well-known reaction of Messrs. Friedel and Crafts, which has played so remarkable a *rôle* in organic chemistry, has recently been made by M. Léon Roux. In a long but highly interesting communication to the *Annales de Chimie et Physique*, M. Roux describes how he has been enabled, with the aid of that wonderful substance, chloride of aluminium, to extend the bounds of chemistry still further, by preparing a large number of higher homologues of naphthalene. In fact, he has been successful in building up from the heavier molecule of naphthalene an entirely new series of hydrocarbons, analogous in many respects to the series derived, by the earlier use of this reaction, from the lighter molecule of benzene. The insertion of the CH_3 groups, however, is a much more difficult operation in the naphthalene than in the benzene series, and requires a much higher temperature; the homologues themselves, moreover, are much more interesting, inasmuch as two isomeric kinds, α and β, of each are possible. Thus the methyl naphthalene $C_{10}H_7 . CH_3$ formed by the new method was found to consist of a mixture of the α and β isomers, which could be partially separated by taking advantage of their different points of solidification. Ethyl naphthalene, $C_{10}H_7 . C_2H_5$, was most readily obtained by warming, in a flask connected with an inverted condenser, a mixture of 200 grammes naphthalene, 200 grammes ethyl iodide, and 20 grammes of aluminium chloride, added gradually as the reaction proceeded. The fraction of the product boiling between 249° and 254° was isolated as a colourless highly refractive liquid, exhibiting violet fluorescence, and was shown by analysis, and by the nature of its oxidation products, to consist of almost pure β ethyl naphthalene mixed with a minute quantity of the α compound. In a similar manner, propyl, butyl, amyl, and benzyl naphthalene have been prepared; indeed, there appears to be no limit to the number of naphthalene derivatives possible to be obtained in this manner, and there can be no doubt that M. Roux is perfectly warranted in applying the somewhat exclusive term "classical" to the work of Messrs. Friedel and Crafts, which has led to the synthesis of so large a number of carbon compounds.

At the meeting of the Helvetic Society of Sciences this year Prof. Weber described a very sensitive micro-radiometer made in the following way:—One arm of a Wheatstone's bridge is formed by a thin tube, which is filled in its middle part with mercury, and at its ends, for about 5 mm., with a solution of zinc sulphate. To each end of the tube is fitted a metallic case, one side of which consists of a plate of rock salt. This case is filled with air, which dilates under the influence of radiation forces back the zinc-sulphate solution in the tube, and thus greatly increases the electric resistance on that side. The apparatus is made symmetrical, to eliminate variations of temperature and pressure. This radiometer will indicate 100-millionths of a degree. The moon's radiation gives a galvanometric oscillation of about five divisions.

It is estimated that the air in a room becomes distinctly bad for health when its carbonic acid exceeds 1 part in 1000. An apparatus has been recently patented by Prof. Wolpert, of Nürnberg, which affords a measure of the carbonic acid present. From a vessel containing a red liquid (soda-solution with phenolphthalein) there comes every 100 seconds, through a siphon-arrangement, a red drop on a prepared white thread about a foot and a half long, and trickles down this. Behind the thread is a scale beginning with "pure air" (up to 0·7 per 1000) at the bottom, and ending above with "extremely bad" (4 to 7 per 1000 and more). In pure air the drop continues red down to the bottom, but it loses its colour by the action of carbonic acid, and the sooner the more there is of that gas present.

Some interesting experiments on the reciprocal influence of organs of sense have been recently made by Herr Urbanschitsch, of Vienna. His general conclusion is that any sense-excitation has for result an increase of the acuteness of other senses. Thus, sensations of hearing sharpen the visual perceptions. If coloured plates are placed at such a distance that one can hardly distinguish the colours, and various sounds are then produced, the colours become generally more distinct the higher the sounds. Similarly, one can, while a sound affects the ear, read words which one could not read before. Again, the ticking of a watch is better heard when the eyes are open than when they are closed. Red and green increase auditive perceptions; but blue and yellow weaken them. Several musicians, however, were agreed that red, green, yellow, and blue caused an intensification of sound about one-eighth; while violet had a weakening effect. Taste, smell, and touch are under like laws. Light. and red and green colour, increase their delicacy; while darkness, blue, and yellow diminish it. Under the influence of red and green, taste extends from the anterior border of the tongue to the whole surface. On the other hand, a strengthening of smell, taste, or touch, exalts the other sensitive perceptions. Specially interesting is the reciprocal influence of touch and the sense of temperature. If one tickle the skin with a hair, and plunge the hand in hot water, the tickling sensation ceases; on the contrary, if the hand be placed in cold water, and a part of the body tickled, the temperature is felt more vividly. Herr Urbanschitsch finds in this reciprocal action an explanation of supposed double consecutive sensations on excitation of one sense.

Prof. Lindeman contributes to the last two issues of the *Bulletin de la Société des Naturalistes de Moscou* (1887, Nos. 2 and 3) two very elaborate papers on the Hessian fly. He points out that there can be no universal remedies for this pest, because the manner of life of the Hessian fly, and the conditions of its multiplication, vary to some extent in different climates. His study of the Hessian fly in the neighbourhood of Moscow has enabled him to describe at length the conditions which are, and those which are not, favourable for its development in that district. About Moscow it never propagates on any of those plants —Gramineæ or others—which grow amidst the crops of the Russian corn-fields. Of the three generations which develop there—the spring generation, from the beginning of May to the beginning of June (old style), the summer one, from June 19 to the beginning of August, and the autumn one, to the end of August—each must find for its propagation green stems of rye, wheat, or barley; and these stems must remain green and succulent throughout the twenty-eight days that the larva is living. Of insects which hunt the larvæ of the Hessian fly, *Geophilus*, the larva of a *Cantharid*, and one mite are noticed. The parasitic Pteromalines of the fly have been described by the same author in the first number of this year's *Bulletin*.

We have received the last number of the Transactions of the Asiatic Society of Japan (vol. xv. Part 1), in which the well-known Chinese scholar Mr. E. H. Parker discusses in two papers the relation between the Japanese language and the languages of the neighbouring continent. He comes to the conclusion, after an elaborate examination of a list of a thousand Japanese words, that a great part of the modern Japanese language may be traced back to a language common with that language from which the modern dialects of China have all been derived. Mr. Walter Dening gives an abstract of the rules, an account of the general work, and a list of the papers published in the Proceedings of a Japanese Society established for the discussion and elucidation of various educational questions; or, in the words of its rules, "to raise the standard of scholarship and supply the wants of the teacher and reformer." Amongst the papers which have been published by the Society we select the titles of a few in order to show its scope:—"Female Education"; "An Account of the Origin and Development of Natural History in Japan"; "The Compilation of a Japanese Grammar"; "On Sending Students of Natural History to China and Corea"; "The Connection of Clothing and Health"; "Iron Ore"; "The Origin of Certain Customs"; "The Five Races of China." So far, eight parts of the Society's magazine appear to have been published, and these contain about a hundred papers by Japanese scholars of eminence, many of them, like Ito Keisuke, the veteran botanist, bearing names known in Europe.

We have received Nos. 31–45 of "Länderkunde des Erdteils Europa," a valuable and most interesting work, edited by Prof. Alfred Kirchhoff, which is being issued in "Lieferungen." Prof. Kirchhoff is aided by many eminent writers. The publishers are F. Tempsky, of Vienna and Prague, and G. Freytag, of Leipzig.

Two papers just printed in the Philosophical Transactions of the Royal Society have been sent to us—"Some Anomalies in the Winds of Northern India, and their Relation to the Distribution of Barometric Pressure," by S. A. Hill; and "Studies on some New Micro-organisms obtained from Air," by Grace C. Frankland and Percy F. Frankland.

MR. F. MOORE, having completed the "Lepidoptera of Ceylon," has now in preparation a much more extensive work comprising the Lepidopterous insects of the entire Indian region. It will be issued in monthly parts, to subscribers only, by the publishers of his previous work, Messrs. L. Reeve and Co.

MR. H. T. OMMANEY, C.S., of Karwar, has sent to the Bombay Natural History Society a full-grown live specimen of the Hamadryad, or King Cobra (*Ophiophagus elaps*). The reptile, which measures about 12 feet in length, is jet black, with faint cream-coloured bars across its back. The throat is of a golden-yellow colour.

A NEW "Catalogue of Mathematical Books," including many of the works of the old mathematicians, has been issued by Messrs. Macmillan and Bowes, Cambridge.

DR. OVERBECK, who owns part of the collections that originally belonged to Alexander von Humboldt, has sent a report about them to the Saxe-Thuringian Naturalists' Society at Halle. He enumerates 290 objects. Dr. Overbeck intends to present Humboldt's collection of minerals to the Mineralogical Museum of Halle University.

THE additions to the Zoological Society's Gardens during the past week include three American Flying Squirrels (*Sciuropterus volucella*) from Florida, presented by Mr. Henry D. Harrison; two Great Eagle Owls (*Bubo maximus*), European, deposited; two Common Wolves (*Canis lupus* ♂ ♀), European, received in exchange.

OUR ASTRONOMICAL COLUMN.

THE NATAL OBSERVATORY.—Mr. Neison, Superintendent of this Observatory, has issued his Report for 1886, and it appears from it that the astronomical work during that year was almost wholly confined to routine observations with the transit instrument, though the meteorological observations were carried on as usual. This partial suspension of activity was due to the fact that only one assistant is now on the staff, and that, through the severe illness of the Superintendent during the first part of the year and his enforced absence in England during the latter part, the assistant, Mr. Grant, was left practically single-handed. The present year will probably show better results, as Mr. Neison returned to his post before the close of 1886, and several needed instrumental improvements and repairs had been successfully carried out. Mr. Neison had commenced an important work connecting the fundamental declinations of the star catalogues of the northern and southern observatories, by means of observations of the differences in zenith distance between 32 selected stars which cross the meridians of the great northern observatories near their zeniths on the one hand, and a set of corresponding southern circumpolar stars on the other.

OLBERS' COMET, 1887.—The following ephemeris for Berlin midnight for this object is in continuation of that given in NATURE of December 1, p. 37:—

1887.	R.A. h. m. s.	Decl. ° ′	Log *r*.	Log Δ.	Brightness.
Dec. 17	16 7 41	2 47·2 N.	0·1990	0·3593	0·63
19	16 12 21	2 18·4			
21	16 16 56	1 50·5	0·2090	0·3645	0·59
23	16 21 25	1 23·5			
25	16 25 48	0 57·3	0·2190	0·3695	0·55
27	16 30 6	0 31·9			
29	16 34 19	0 7·4 N.	0·2290	0·3741	0·51
31	16 38 27	0 16·2 S.			
1888.					
Jan. 2	16 42 30	0 39·0	0·2389	0·3783	0·48
4	16 46 27	1 1·2			
6	16 50 20	1 22·7 S.	0·2486	0·3821	0·45

PROBABLE NEW CLASS OF VARIABLE STARS.—The Rev. T. E. Espin considers that a number of our variable stars possess characteristics which justify their being formed into a separate class. They are irregular both in period and variation, the latter being usually about 1½ mag., and they show spectra of Secchi's fourth type, *i.e.* like No. 152 Schjellerup. Their changes in brightness are rapid and uncertain. Mr. Espin names 19 Piscium, Birmingham 277, 521, 535, 541, and Espin 116, 154, as belonging to this new class, which perhaps embraces also Birmingham 85, 120, 121, 240, 290, 418, 464, 483, and 502.

ASTRONOMICAL PHENOMENA FOR THE WEEK 1887 DECEMBER 18-24.

(FOR the reckoning of time the civil day, commencing at Greenwich mean midnight, counting the hours on to 24, is here employed.)

At Greenwich on December 18

Sun rises, 8h. 4m.; souths, 11h. 56m. 45·5s.; sets, 15h. 50m.: right asc. on meridian, 17h. 43·9m.; decl. 23° 24′ S. Sidereal Time at Sunset, 21h. 38m.

Moon (at First Quarter on December 22, 7h.) rises, 10h. 48m.; souths, 15h. 23m.; sets, 20h. 4m.: right asc. on meridian, 21h. 10·7m.; decl. 16° 43′ S.

Planet.	Rises. h. m.	Souths. h. m.	Sets. h. m.	Right asc. and declination on meridian. h. m.	° ′
Mercury	6 35	10 44	14 53	16 31·1	21 4 S.
Venus	3 48	8 48	13 48	16 34·5	12 16 S.
Mars	0 38	6 39	12 40	12 25·6	0 37 S.
Jupiter	5 17	9 44	14 11	15 30·8	18 9 S.
Saturn	18 59*	2 47	10 35	8 32·8	19 16 N.
Uranus	1 43	7 16	12 49	13 2·5	5 58 S.
Neptune	14 16	21 56	5 36*	3 44·3	18 1 N.

* Indicates that the rising is that of the preceding evening and the setting that of the following morning.

Occultation of Star by the Moon (visible at Greenwich).

Dec.	Star.	Mag.	Disap. h. m.	Reap. h. m.	Corresponding angles from vertex to right for inverted image. ° °
18	ι Capricorni	4½	17 58	18 59	103 350

December 22.—Sun at greatest declination south; shortest day in northern latitudes.

Variable Stars.

Star.	R.A. h. m.	Decl. ° ′		h. m.	
U Cephei	0 52·3	81 16 N.	Dec. 21,	23 44	*m*
λ Tauri	3 54·4	12 10 N.	,, 18,	22 54	*m*
			,, 22,	21 46	*m*
ζ Geminorum	6 57·4	20 44 N.	,, 19,	22 0	*m*
			,, 24,	22 0	*M*
R Canis Majoris	7 14·3	16 11 S.	,, 19,	2 19	*m*
			,, 20,	5 35	*m*
S Cancri	8 37·5	19 26 N.	,, 21,	23 57	*m*
δ Libræ	14 54·9	8 4 S.	,, 18,	22 2	*m*
U Coronæ	15 13·6	32 4 N.	,, 21,	18 29	*m*
R Serpentis	15 45·5	15 29 N.	,, 21,		*M*
β Lyræ	18 45·9	33 14 N.	,, 18,	2 0	*m*
Y Cygni	20 45·6	34 10 N.	,, 20,	21 51	*m*
			,, 23,	21 45	*m*
δ Cephei	22 25·0	57 50 N.	,, 23,	2 0	*M*

M signifies maximum; *m* minimum.

Meteor-Shower.

	R.A.	Decl.
Near λ Ursæ Majoris	130°	49° N.

GEOGRAPHICAL NOTES.

THE new number of *Petermann's Mitteilungen* contains a letter from Dr. Hans Meyer, written from Taveta, at the foot of Kilimanjaro, giving some details of his ascent of that mountain, and the results of his observations; it is accompanied by a sketch-map. Dr. Meyer, with one white companion and twenty-two natives, started from Mareale's village, at the south foot of the mountain, in the beginning of July, and proceeded to mount the southern slopes. At 1800 metres the last bananas were passed, and at 2000 metres the saturated forest belt was entered, which on the second day was left behind. Immediately above this stretches a broad belt of grass,